

# Ferric Chloride Use In Wastewater Treatment

Presented By:  
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Operations  
Committee

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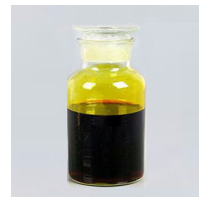
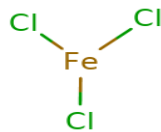
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## Ferric Chloride – FeCl<sub>3</sub>

- Coagulant of choice for WWT applications due to its high efficiency and effectiveness in clarifying and reducing suspended solids
- Reacts with sulfates to prevent the formation hydrogen of sulfide odors

Alternatives – None as effective, some create additional sludge

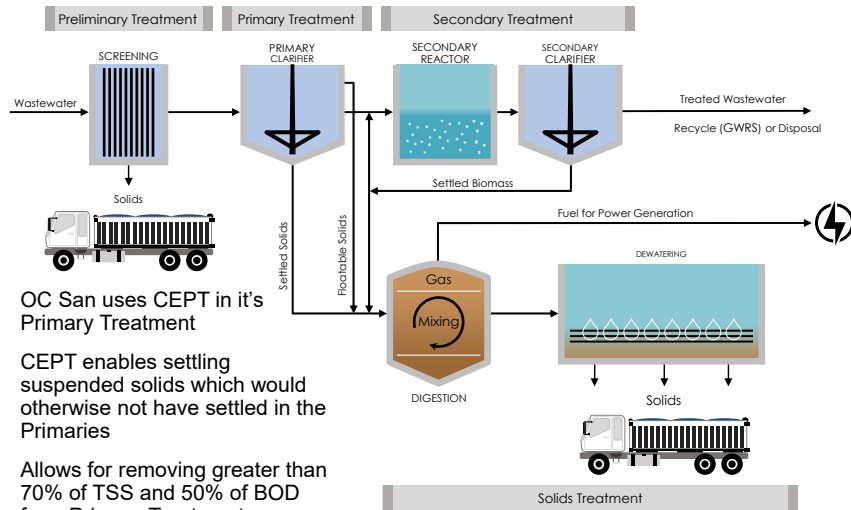
- Aluminum Sulfate, Aluminum Chloride and Sodium Aluminate
- Ferrous Chloride, Ferric/Ferrous Sulfate



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## Typical Wastewater Treatment



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## Steps Taken to Minimize Purchases

### FERRIC CHLORIDE:

- Staff Continue to Optimize FeCL3 Dosages in CEPT
- Trials are Occurring with Newer Methods to Reduce Sulfides in Digesters
- Align Odor Control Efforts in Collection Systems and Optimize Ferric Use in Treatment Plants

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## Recommendation

### Recommend to the Board of Directors to:

- Approve a unit price contingency of \$226 per dry ton (27%) to the Liquid Ferric Chloride Agreement with Pencco, Inc., Specification No.C-2019-1037BD, for the period beginning March 1, 2023 through June 30, 2023. New unit cost not to exceed \$1,075 per dry ton delivered; and
- Approve a unit price contingency of \$310 per dry ton (32%) to the liquid Ferric Chloride Agreement with Kemira, Inc., Specification No.C-2019-1037BD, for the period beginning March 1, 2023 through June 30, 2023. New unit cost not to exceed \$1,274.47 per dry ton delivered.

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## Questions



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